(6) Territorial sea

The term "territorial sea" means the belt of sea measured from the baseline of the United States determined in accordance with international law, as set forth in Presidential Proclamation Number 5928, dated December 27, 1988.

(7) Nongovernmental entities

The term "nongovernmental entities" includes nongovernmental organizations, members of the academic community, and private sector organizations that provide products and services associated with measuring, locating, and preparing maps, charts, surveys, aerial photographs, satellite imagines, or other graphical or digital presentations depicting natural or manmade physical features, phenomena, and legal boundaries of the Earth.

(8) Outer Continental Shelf

The term "Outer Continental Shelf" means all submerged lands lying seaward and outside of lands beneath navigable waters (as that term is defined in section 1301 of title 43), and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control.

(Pub. L. 111–11, title XII, §12208, Mar. 30, 2009, 123 Stat. 1426.)

REFERENCES IN TEXT

Presidential Proclamation No. 5030, referred to in par. (4), is set out under section 1453 of Title 16, Conservation.

Presidential Proclamation Number 5928, referred to in par. (6), is set out under section 1331 of Title 43, Public Lands

CHAPTER 49—INTEGRATED COASTAL AND OCEAN OBSERVATION SYSTEM

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§ 3601. Purposes

The purposes of this chapter are to-

(1) establish a national integrated System of ocean, coastal, and Great Lakes observing systems, comprised of Federal and non-Federal components coordinated at the national level by the National Ocean Research Leadership Council and at the regional level by a network of regional information coordination entities, and that includes in situ, remote, and other coastal and ocean observation, technologies, and data management and communication systems, and is designed to address regional and national needs for ocean information, to gather specific data on key coastal, ocean, and Great Lakes variables, and to ensure timely

and sustained dissemination and availability of these data to— $\,$

- (A) support national defense, marine commerce, navigation safety, weather, climate, and marine forecasting, energy siting and production, economic development, ecosystem-based marine, coastal, and Great Lakes resource management, public safety, and public outreach training and education;
- (B) promote greater public awareness and stewardship of the Nation's ocean, coastal, and Great Lakes resources and the general public welfare; and
- (C) enable advances in scientific understanding to support the sustainable use, conservation, management, and understanding of healthy ocean, coastal, and Great Lakes resources:
- (2) improve the Nation's capability to measure, track, explain, and predict events related directly and indirectly to weather and climate change, natural climate variability, and interactions between the oceanic and atmospheric environments, including the Great Lakes; and
- (3) authorize activities to promote basic and applied research to develop, test, and deploy innovations and improvements in coastal and ocean observation technologies, modeling systems, and other scientific and technological capabilities to improve our conceptual understanding of weather and climate, ocean-atmosphere dynamics, global climate change, physical, chemical, and biological dynamics of the ocean, coastal and Great Lakes environments, and to conserve healthy and restore degraded coastal ecosystems.

(Pub. L. 111–11, title XII, §12302, Mar. 30, 2009, 123 Stat. 1427.)

SHORT TITLE

Pub. L. 111–11, title XII, §12301, Mar. 30, 2009, 123 Stat. 1427, provided that: "This subtitle [subtitle C (§§12301–12311) of title XII of Pub. L. 111–11, enacting this chapter] may be cited as the 'Integrated Coastal and Ocean Observation System Act of 2009'."

§ 3602. Definitions

In this chapter:

(1) Administrator

The term "Administrator" means the Under Secretary of Commerce for Oceans and Atmosphere in the Under Secretary's capacity as Administrator of the National Oceanic and Atmospheric Administration.

(2) Council

The term "Council" means the National Ocean Research Leadership Council established by section 7902 of title 10.

(3) Federal assets

The term "Federal assets" means all relevant non-classified civilian coastal and ocean observations, technologies, and related modeling, research, data management, basic and applied technology research and development, and public education and outreach programs, that are managed by member agencies of the Council.

(4) Interagency Ocean Observation Committee

The term "Interagency Ocean Observation Committee" means the committee established under section 3603(c)(2) of this title.

(5) Non-Federal assets

The term "non-Federal assets" means all relevant coastal and ocean observation technologies, related basic and applied technology research and development, and public education and outreach programs that are integrated into the System and are managed through States, regional organizations, universities, nongovernmental organizations, or the private sector.

(6) Regional information coordination entities

(A) In general

The term "regional information coordination entity" means an organizational body that is certified or established by contract or memorandum by the lead Federal agency designated in section 3603(c)(3) of this title and coordinates State, Federal, local, and private interests at a regional level with the responsibility of engaging the private and public sectors in designing, operating, and improving regional coastal and ocean observing systems in order to ensure the provision of data and information that meet the needs of user groups from the respective regions.

(B) Certain included associations

The term "regional information coordination entity" includes regional associations described in the System Plan.

(7) Secretary

The term "Secretary" means the Secretary of Commerce, acting through the National Oceanic and Atmospheric Administration.

(8) System

The term "System" means the National Integrated Coastal and Ocean Observation System established under section 3603 of this title.

(9) System Plan

The term "System Plan" means the plan contained in the document entitled "Ocean. US Publication No. 9, The First Integrated Ocean Observing System (IOOS) Development Plan", as updated by the Council under this chapter.

(Pub. L. 111-11, title XII, §12303, Mar. 30, 2009, 123 Stat. 1428.)

§ 3603. Integrated Coastal and Ocean Observing System

(a) Establishment

The President, acting through the Council, shall establish a National Integrated Coastal and Ocean Observation System to fulfill the purposes set forth in section 3601 of this title and the System Plan and to fulfill the Nation's international obligations to contribute to the Global Earth Observation System of Systems and the Global Ocean Observing System.

(b) System elements

(1) In general

In order to fulfill the purposes of this chapter, the System shall be national in scope and consist of—

- (A) Federal assets to fulfill national and international observation missions and priorities:
- (B) non-Federal assets, including a network of regional information coordination entities identified under subsection (c)(4), to fulfill regional observation missions and priorities:
- (C) data management, communication, and modeling systems for the timely integration and dissemination of data and information products from the System:
- (D) a research and development program conducted under the guidance of the Council, consisting of—
- (i) basic and applied research and technology development to improve understanding of coastal and ocean systems and their relationships to human activities and to ensure improvement of operational assets and products, including related infrastructure, observing technologies, and information and data processing and management technologies; and
- (ii) large scale computing resources and research to advance modeling of coastal and ocean processes.

(2) Enhancing administration and management

The head of each Federal agency that has administrative jurisdiction over a Federal asset shall support the purposes of this chapter and may take appropriate actions to enhance internal agency administration and management to better support, integrate, finance, and utilize observation data, products, and services developed under this section to further its own agency mission and responsibilities.

(3) Availability of data

The head of each Federal agency that has administrative jurisdiction over a Federal asset shall make available data that are produced by that asset and that are not otherwise restricted for integration, management, and dissemination by the System.

(4) Non-Federal assets

Non-Federal assets shall be coordinated, as appropriate, by the Interagency Ocean Observing Committee or by regional information coordination entities.

(c) Policy oversight, administration, and regional coordination

(1) Council functions

The Council shall serve as the policy and coordination oversight body for all aspects of the System. In carrying out its responsibilities under this chapter, the Council shall—

(A) approve and adopt comprehensive System budgets developed and maintained by the Interagency Ocean Observation Committee to support System operations, including operations of both Federal and non-Federal assets:

- (B) ensure coordination of the System with other domestic and international earth observing activities including the Global Ocean Observing System and the Global Earth Observing System of Systems, and provide, as appropriate, support for and representation on United States delegations to international meetings on coastal and ocean observing programs; and
- (C) encourage coordinated intramural and extramural research and technology development, and a process to transition developing technology and methods into operations of the System.

(2) Interagency Ocean Observation Committee

The Council shall establish or designate an Interagency Ocean Observation Committee which shall—

- (A) prepare annual and long-term plans for consideration and approval by the Council for the integrated design, operation, maintenance, enhancement and expansion of the System to meet the objectives of this chapter and the System Plan;
- (B) develop and transmit to Congress at the time of submission of the President's annual budget request an annual coordinated, comprehensive budget to operate all elements of the System identified in subsection (b), and to ensure continuity of data streams from Federal and non-Federal assets;
- (C) establish required observation data variables to be gathered by both Federal and non-Federal assets and identify, in consultation with regional information coordination entities, priorities for System observations;
- (D) establish protocols and standards for System data processing, management, and communication;
- (E) develop contract certification standards and compliance procedures for all non-Federal assets, including regional information coordination entities, to establish eligibility for integration into the System and to ensure compliance with all applicable standards and protocols established by the Council, and ensure that regional observations are integrated into the System on a sustained basis;
- (F) identify gaps in observation coverage or needs for capital improvements of both Federal assets and non-Federal assets;
- (G) subject to the availability of appropriations, establish through one or more participating Federal agencies, in consultation with the System advisory committee established under subsection (d), a competitive matching grant or other programs—
 - (i) to promote intramural and extramural research and development of new, innovative, and emerging observation technologies including testing and field trials; and
 - (ii) to facilitate the migration of new, innovative, and emerging scientific and technological advances from research and development to operational deployment;
- (H) periodically review and recommend to the Council, in consultation with the Administrator, revisions to the System Plan;

- (I) ensure collaboration among Federal agencies participating in the activities of the Committee; and
- (J) perform such additional duties as the Council may delegate.

(3) Lead Federal agency

The National Oceanic and Atmospheric Administration shall function as the lead Federal agency for the implementation and administration of the System, in consultation with the Council, the Interagency Ocean Observation Committee, other Federal agencies that maintain portions of the System, and the regional information coordination entities, and shall—

- (A) establish an Integrated Ocean Observing Program Office within the National Oceanic and Atmospheric Administration utilizing to the extent necessary, personnel from member agencies participating on the Interagency Ocean Observation Committee, to oversee daily operations and coordination of the System;
- (B) implement policies, protocols, and standards approved by the Council and delegated by the Interagency Ocean Observing Committee;
- (C) promulgate program guidelines to certify and integrate non-Federal assets, including regional information coordination entities, into the System to provide regional coastal and ocean observation data that meet the needs of user groups from the respective regions;
- (D) have the authority to enter into and oversee contracts, leases, grants or cooperative agreements with non-Federal assets, including regional information coordination entities, to support the purposes of this chapter on such terms as the Administrator deems appropriate;
- (E) implement a merit-based, competitive funding process to support non-Federal assets, including the development and maintenance of a network of regional information coordination entities, and develop and implement a process for the periodic review and evaluation of all non-Federal assets, including regional information coordination entities:
- (F) provide opportunities for competitive contracts and grants for demonstration projects to design, develop, integrate, deploy, and support components of the System;
- (G) establish efficient and effective administrative procedures for allocation of funds among contractors, grantees, and non-Federal assets, including regional information coordination entities in a timely manner, and contingent on appropriations according to the budget adopted by the Council;
- (H) develop and implement a process for the periodic review and evaluation of regional information coordination entities;
- (I) formulate an annual process by which gaps in observation coverage or needs for capital improvements of Federal assets and non-Federal assets of the System are identified by the regional information coordination entities, the Administrator, or other

members of the System and transmitted to the Interagency Ocean Observing Committee:

- (J) develop and be responsible for a data management and communication system, in accordance with standards and protocols established by the Council, by which all data collected by the System regarding ocean and coastal waters of the United States including the Great Lakes, are processed, stored, integrated, and made available to all enduser communities;
- (K) implement a program of public education and outreach to improve public awareness of global climate change and effects on the ocean, coastal, and Great Lakes environment;
- (L) report annually to the Interagency Ocean Observing Committee on the accomplishments, operational needs, and performance of the System to contribute to the annual and long-term plans developed pursuant to subsection (c)(2)(A)(i); and
- (M) develop a plan to efficiently integrate into the System new, innovative, or emerging technologies that have been demonstrated to be useful to the System and which will fulfill the purposes of this chapter and the System Plan.

(4) Regional information coordination entities (A) In general

To be certified or established under this chapter, a regional information coordination entity shall be certified or established by contract or agreement by the Administrator, and shall agree to meet the certification standards and compliance procedure guidelines issued by the Administrator and information needs of user groups in the region while adhering to national standards and shall—

- (i) demonstrate an organizational structure capable of gathering required System observation data, supporting and integrating all aspects of coastal and ocean observing and information programs within a region and that reflects the needs of State and local governments, commercial interests, and other users and beneficiaries of the System and other requirements specified under this chapter and the System
- (ii) identify gaps in observation coverage needs for capital improvements of Federal assets and non-Federal assets of the System, or other recommendations to assist in the development of the annual and long-term plans created pursuant to subsection $(c)(2)(A)(i)^1$ and transmit such information to the Interagency Ocean Observing Committee via the Program Office;
- (iii) develop and operate under a strategic operational plan that will ensure the efficient and effective administration of programs and assets to support daily data observations for integration into the System, pursuant to the standards approved by the Council;

(iv) work cooperatively with governmental and non-governmental entities at all levels to identify and provide information products of the System for multiple users within the service area of the regional information coordination entities; and

(v) comply with all financial oversight requirements established by the Administrator, including requirements relating to audits.

(B) Participation

For the purposes of this chapter, employees of Federal agencies may participate in the functions of the regional information coordination entities.

(d) System advisory committee

(1) In general

The Administrator shall establish or designate a System advisory committee, which shall provide advice as may be requested by the Administrator or the Interagency Ocean Observing Committee.

(2) Purpose

The purpose of the System advisory committee is to advise the Administrator and the Interagency Ocean Observing Committee on—

- (A) administration, operation, management, and maintenance of the System, including integration of Federal and non-Federal assets and data management and communication aspects of the System, and fulfillment of the purposes set forth in section 3601 of this title;
- (B) expansion and periodic modernization and upgrade of technology components of the System;
- (C) identification of end-user communities, their needs for information provided by the System, and the System's effectiveness in disseminating information to end-user communities and the general public; and
- (D) any other purpose identified by the Administrator or the Interagency Ocean Observing Committee.

(3) Members

(A) In general

The System advisory committee shall be composed of members appointed by the Administrator. Members shall be qualified by education, training, and experience to evaluate scientific and technical information related to the design, operation, maintenance, or use of the System, or use of data products provided through the System.

(B) Terms of service

Members shall be appointed for 3-year terms, renewable once. A vacancy appointment shall be for the remainder of the unexpired term of the vacancy, and an individual so appointed may subsequently be appointed for 2 full 3-year terms if the remainder of the unexpired term is less than 1 year.

(C) Chairperson

The Administrator shall designate a chairperson from among the members of the System advisory committee.

¹ So in original. Subsec. (c)(2)(A) does not contain a cl. (i).

(D) Appointment

Members of the System advisory committee shall be appointed as special Government employees for purposes of section 202(a) of title 18.

(4) Administrative provisions

(A) Reporting

The System advisory committee shall report to the Administrator and the Interagency Ocean Observing Committee, as appropriate.

(B) Administrative support

The Administrator shall provide administrative support to the System advisory committee.

(C) Meetings

The System advisory committee shall meet at least once each year, and at other times at the call of the Administrator, the Interagency Ocean Observing Committee, or the chairperson.

(D) Compensation and expenses

Members of the System advisory committee shall not be compensated for service on that Committee, but may be allowed travel expenses, including per diem in lieu of subsistence, in accordance with subchapter I of chapter 57 of title 5.

(E) Expiration

Section 14 of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the System advisory committee.

(e) Civil liability

For purposes of determining liability arising from the dissemination and use of observation data gathered pursuant to this section, any non-Federal asset or regional information coordination entity incorporated into the System by contract, lease, grant, or cooperative agreement under subsection (c)(3)(D) that is participating in the System shall be considered to be part of the National Oceanic and Atmospheric Administration. Any employee of such a non-Federal asset or regional information coordination entity, while operating within the scope of his or her employment in carrying out the purposes of this chapter, with respect to tort liability, is deemed to be an employee of the Federal Government.

(f) Limitation

Nothing in this chapter shall be construed to invalidate existing certifications, contracts, or agreements between regional information coordination entities and other elements of the System.

(Pub. L. 111–11, title XII, §12304, Mar. 30, 2009, 123 Stat. 1429.)

REFERENCES IN TEXT

Section 14 of the Federal Advisory Committee Act, referred to in subsec. (d)(4)(E), is section 14 of Pub. L. 92–463, which is set out in the Appendix to Title 5, Government Organization and Employees.

$\S 3604$. Interagency financing and agreements

(a) In general

To carry out interagency activities under this chapter, the Secretary of Commerce may exe-

cute cooperative agreements, or any other agreements, with, and receive and expend funds made available by, any State or subdivision thereof, any Federal agency, or any public or private organization, or individual.

(b) Reciprocity

Member Departments and agencies of the Council shall have the authority to create, support, and maintain joint centers, and to enter into and perform such contracts, leases, grants, and cooperative agreements as may be necessary to carry out the purposes of this chapter and fulfillment of the System Plan.

(Pub. L. 111–11, title XII, §12305, Mar. 30, 2009, 123 Stat. 1434.)

§ 3605. Application with other laws

Nothing in this chapter supersedes or limits the authority of any agency to carry out its responsibilities and missions under other laws.

(Pub. L. 111–11, title XII, §12306, Mar. 30, 2009, 123 Stat. 1435.)

§ 3606. Report to Congress

(a) Requirement

Not later than 2 years after March 30, 2009, and every 2 years thereafter, the Administrator shall prepare and the President acting through the Council shall approve and transmit to the Congress a report on progress made in implementing this chapter.

(b) Contents

The report shall include—

- (1) a description of activities carried out under this chapter and the System Plan:
- (2) an evaluation of the effectiveness of the System, including an evaluation of progress made by the Council to achieve the goals identified under the System Plan;
- (3) identification of Federal and non-Federal assets as determined by the Council that have been integrated into the System, including assets essential to the gathering of required observation data variables necessary to meet the respective missions of Council agencies;
- (4) a review of procurements, planned or initiated, by each Council agency to enhance, expand, or modernize the observation capabilities and data products provided by the System, including data management and communication subsystems;
- (5) an assessment regarding activities to integrate Federal and non-Federal assets, nationally and on the regional level, and discussion of the performance and effectiveness of regional information coordination entities to coordinate regional observation operations;
- (6) a description of benefits of the program to users of data products resulting from the System (including the general public, industries, scientists, resource managers, emergency responders, policy makers, and educators):
 - (7) recommendations concerning—
 - (A) modifications to the System; and
 - (B) funding levels for the System in subsequent fiscal years; and
- (8) the results of a periodic external independent programmatic audit of the System.

(Pub. L. 111–11, title XII, §12307, Mar. 30, 2009, 123 Stat. 1435.)

§ 3607. Public-private use policy

The Council shall develop a policy within 6 months after March 30, 2009, that defines processes for making decisions about the roles of the Federal Government, the States, regional information coordination entities, the academic community, and the private sector in providing to end-user communities environmental information, products, technologies, and services related to the System. The Council shall publish the policy in the Federal Register for public comment for a period not less than 60 days. Nothing in this section shall be construed to require changes in policy in effect on March 30, 2009

(Pub. L. 111-11, title XII, §12308, Mar. 30, 2009, 123 Stat. 1435.)

§ 3608. Independent cost estimate

Within 1 year after March 30, 2009, the Interagency Ocean Observation Committee, through the Administrator and the Director of the National Science Foundation, shall obtain an independent cost estimate for operations and maintenance of existing Federal assets of the System, and planned or anticipated acquisition, operation, and maintenance of new Federal assets for the System, including operation facilities, observation equipment, modeling and software, data management and communication, and other essential components. The independent cost estimate shall be transmitted unabridged and without revision by the Administrator to Congress.

(Pub. L. 111–11, title XII, §12309, Mar. 30, 2009, 123 Stat. 1436.)

§ 3609. Intent of Congress

It is the intent of Congress that funding provided to agencies of the Council to implement this chapter shall supplement, and not replace, existing sources of funding for other programs. It is the further intent of Congress that agencies of the Council shall not enter into contracts or agreements for the development or procurement of new Federal assets for the System that are estimated to be in excess of \$250,000,000 in lifecycle costs without first providing adequate notice to Congress and opportunity for review and comment.

(Pub. L. 111–11, title XII, §12310, Mar. 30, 2009, 123 Stat. 1436.)

§ 3610. Authorization of appropriations

There are authorized to be appropriated to the Secretary of Commerce for fiscal years 2009 through 2013 such sums as are necessary to fulfill the purposes of this chapter and support activities identified in the annual coordinated System budget developed by the Interagency Ocean Observation Committee and submitted to the Congress.

(Pub. L. 111-11, title XII, §12311, Mar. 30, 2009, 123 Stat. 1436.)

§3611. Assessing and modeling named storms over coastal States

(a) Definitions

In this section:

(1) COASTAL Formula

The term "COASTAL Formula" has the meaning given the term in section 4057(a) of title 42.

(2) Coastal State

The term "coastal State" has the meaning given the term "coastal state" in section 1453 of title 16.

(3) Coastal waters

The term "coastal waters" has the meaning given the term in such section.

(4) Covered data

The term "covered data" means, with respect to a named storm identified by the Administrator under subsection (b)(2)(A), empirical data that are—

(A) collected before, during, or after such storm; and

(B) necessary to determine magnitude and timing of wind speeds, rainfall, the barometric pressure, river flows, the extent, height, and timing of storm surge, topographic and bathymetric data, and other measures required to accurately model and assess damage from such storm.

(5) Indeterminate loss

The term "indeterminate loss" has the meaning given the term in section 4057(a) of title 42.

(6) Named storm

The term "named storm" means any organized weather system with a defined surface circulation and maximum winds of at least 39 miles per hour which the National Hurricane Center of the United States National Weather Service names as a tropical storm or a hurri-

(7) Named Storm Event Model

The term "Named Storm Event Model" means the official meteorological and oceanographic computerized model, developed by the Administrator under subsection (b)(1)(A), which utilizes covered data to replicate the magnitude, timing, and spatial variations of winds, rainfall, and storm surges associated with named storms that threaten any portion of a coastal State.

(8) Participant

The term "participant" means a Federal, State, or private entity that chooses to cooperate with the Administrator in carrying out the provisions of this section by collecting, contributing, and maintaining covered data

(9) Post-storm assessment

The term "post-storm assessment" means a scientific assessment produced and certified by the Administrator to determine the magnitude, timing, and spatial variations of winds, rainfall, and storm surges associated

with a specific named storm to be used in the COASTAL Formula.

(10) State

The term "State" means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, and any other territory or possession of the United States.

(b) Named Storm Event Model and post-storm assessment

(1) Establishment of Named Storm Event Model

(A) In general

Not later than 540 days after July 6, 2012, the Administrator shall develop by regulation the Named Storm Event Model.

(B) Accuracy

The Named Storm Event Model shall be designed to generate post-storm assessments, as provided in paragraph (2), that have a degree of accuracy of not less than 90 percent for every indeterminate loss for which a post-storm assessment is utilized.

(2) Post-storm assessment

(A) Identification of named storms threatening coastal States

After the establishment of the COASTAL Formula, the Administrator shall, in consultation with the Secretary of Homeland Security, identify named storms that may reasonably constitute a threat to any portion of a coastal State.

(B) Post-storm assessment required

Upon identification of a named storm under subparagraph (A), the Administrator shall develop a post-storm assessment for such named storm using the Named Storm Event Model and covered data collected for such named storm pursuant to the protocol established under subsection (c)(1).

(C) Submittal of post-storm assessment

Not later than 90 days after an identification of a named storm is made under subparagraph (A), the Administrator shall submit to the Secretary of Homeland Security the post-storm assessment developed for such storm under subparagraph (B).

(3) Accuracy

The Administrator shall ensure, to the greatest extent practicable, that each poststorm assessment developed under paragraph (2) has a degree of accuracy of not less than 90 percent.

(4) Certification

For each post-storm assessment carried out under paragraph (2), the Administrator shall—

(A) certify the degree of accuracy for such assessment, including specific reference to any segments or geographic areas for which the assessment is less than 90 percent accurate: and

(B) report such certification to the Secretary of Homeland Security for the purposes of use with indeterminate loss claims under section 4057 of title 42.

(5) Finality of determinations

A certification of the degree of accuracy of a post-storm assessment under this subsection

by the Administrator shall be final and shall not be subject to judicial review.

(6) Availability

The Administrator shall make available to the public the Named Storm Event Model and any post-storm assessment developed under this subsection.

(c) Establishment of a protocol for post-storm assessment

(1) In general

Not later than 540 days after July 6, 2012, the Administrator shall establish a protocol, based on the plan submitted under subsection (d)(3), to collect and assemble all covered data required by the Administrator to produce post-storm assessments required by subsection (b), including assembling data collected by participants and stored in the database established under subsection (f) and from such other sources as the Administrator considers appropriate.

(2) Acquisition of sensors and structures

If the Administrator is unable to use a public or private asset to obtain covered data as part of the protocol established under paragraph (1), the Administrator may acquire such sensors and structures for the placement of sensors as may be necessary to obtain such data.

(3) Use of Federal assets

If the protocol requires placement of a sensor to develop assessments pursuant to subsection (b), the Administrator shall, to the extent practicable, use Federal assets for the placement of such sensors.

(4) Use of acquired structures

(A) In general

If the Administrator acquires a structure for the placement of a sensor for purposes of such protocol, the Administrator shall to the extent practical permit other public and private entities to place sensors on such structure to collect—

- (i) meteorological data;
- (ii) national security-related data;
- (iii) navigation-related data;
- (iv) hydrographic data; or
- (v) such other data as the Administrator considers appropriate.

(B) Receipt of consideration

The Administrator may receive consideration for the placement of a sensor on a structure under subparagraph (A).

(C) In-kind consideration

Consideration received under subparagraph (B) may be received in-kind.

(D) Use of consideration

To the extent practicable, consideration received under subparagraph (B) shall be used for the maintenance of sensors used to collect covered data.

(5) Coordinated deployments and data collection practices

The Administrator shall, in consultation with the Office of the Federal Coordinator for

Meteorology, coordinate the deployment of sensors as part of the protocol established under paragraph (1) and related data collection carried out by Federal, State, academic, and private entities who choose to cooperate with the Administrator in carrying out this subsection.

(6) Priority acquisition and deployment

The Administrator shall give priority in the acquisition for and deployment of sensors under the protocol required by paragraph (1) to areas of coastal States that have the highest risk of being harmed by named storms.

(d) Assessment of systems and efforts to collect covered data

(1) Identification of systems and efforts to collect covered data

Not later than 180 days after July 6, 2012, the Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology—

(A) carry out a survey to identify all Federal and State efforts and systems that are capable of collecting covered data; and

(B) consult with private and academic sector entities to identify domestic private and academic systems that are capable of collecting covered data.

(2) Identification of gaps

The Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology and individuals and entities consulted under subsection (e)(3), assess the systems identified under paragraph (1) and identify which systems meet the needs of the National Oceanic and Atmospheric Administration for the collection of covered data, including with respect to the accuracy requirement for post-storm assessment under subsection (b)(3).

(3) Plan

Not later than 270 days after July 6, 2012, the Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology, submit to Congress a plan for the collection of covered data necessary to develop the Named Storm Event Model and post-storm assessment required by subsection (b) that addresses any gaps identified in paragraph (2).

(e) Coordination of covered data collection and maintenance by participants

(1) In general

The Administrator shall, in consultation with the Office of the Federal Coordinator for Meteorology, coordinate the collection and maintenance of covered data by participants under this section—

- (A) to streamline the process of collecting covered data in accordance with the protocol established under subsection (c)(1); and
- (B) to maintain transparency of such process and the database established under subsection (f).

(2) Sharing information

The Administrator shall establish a process for sharing among participants information

relevant to collecting and using covered data for—

- (A) academic research;
- (B) private sector use;
- (C) public outreach; and
- (D) such other purposes as the Administrator considers appropriate.

(3) Consultation

In carrying out paragraphs (1) and (2), the Administrator shall consult with the following:

- (A) The Commanding General of the Corps of Engineers.
- (B) The Administrator of the Federal Emergency Management Agency.
 - (C) The Commandant of the Coast Guard.
- (D) The Director of the United States Geological Survey.
- (E) The Office of the Federal Coordinator for Meteorology.
- (F) The Director of the National Science Foundation.
- (G) The Administrator of the National Aeronautics and Space Administration.
- (H) Such public, private, and academic sector entities as the Administrator considers appropriate for purposes of carrying out the provisions of this section.

(f) Establishment of Coastal Wind and Water Event Database

(1) In general

Not later than 1 year after July 6, 2012, the Administrator shall establish a database for the collection and compilation of covered data— $\,$

- (A) to support the protocol established under subsection (c)(1); and
- (B) for the purposes listed in subsection (e)(2).

(2) Designation

The database established under paragraph (1) shall be known as the "Coastal Wind and Water Event Database".

(g) Comptroller General study

Not later than 1 year after July 6, 2012, the Comptroller General of the United States shall—

- (1) complete an audit of Federal efforts to collect covered data for purposes of the Consumer Option for an Alternative System to Allocate Losses Act of 2012, which audit shall—
 - (A) examine duplicated Federal efforts to collect covered data; and
 - (B) determine the cost effectiveness of such efforts; and
- (2) submit to the Committee on Banking, Housing, and Urban Affairs and the Commerce, Science, and Transportation of the Senate and the Committee on Financial Services and the Committee on Science, Space, and Technology of the House of Representatives a report on the findings of the Comptroller General with respect to the audit completed under paragraph (1).

(Pub. L. 111–11, title XII, §12312, as added Pub. L. 112–141, div. F, title II, §100252, July 6, 2012, 126 Stat. 969.)

 $^{^1\}mathrm{So}$ in original. Probably should be followed by "Committee on".

REFERENCES IN TEXT

The Consumer Option for an Alternative System to Allocate Losses Act of 2012, referred to in subsec. (g)(1), is subtitle B (§§ 100251–100253) of title II of div. F of Pub. L 112–141, which enacted this section, section 4057 of Title 42, the Public Health and Welfare, and provisions set out as a note under section 4001 of Title 42. For complete classification of this Act to the Code, see Short Title of 2012 Amendment note set out under section 4001 of Title 42 and Tables.

CHAPTER 50—FEDERAL OCEAN ACIDIFICATION RESEARCH AND MONITORING

Sec. 3701. Purposes. 3702. Definitions.

3703. Interagency Subcommittee. 3704. Strategic research plan.

NOAA ocean acidification activities.
NSF ocean acidification activities.
NASA ocean acidification activities.
Authorization of appropriations.

§ 3701. Purposes

(a) Purposes

The purposes of this chapter are to provide for—

(1) development and coordination of a comprehensive interagency plan to—

- (A) monitor and conduct research on the processes and consequences of ocean acidification on marine organisms and ecosystems; and
- (B) establish an interagency research and monitoring program on ocean acidification;
- (2) establishment of an ocean acidification program within the National Oceanic and Atmospheric Administration;
- (3) assessment and consideration of regional and national ecosystem and socioeconomic impacts of increased ocean acidification; and
- (4) research adaptation strategies and techniques for effectively conserving marine ecosystems as they cope with increased ocean acidification.

(Pub. L. 111–11, title XII, §12402, Mar. 30, 2009, 123 Stat. 1436.)

SHORT TITLE

Pub. L. 111–11, title XII, §12401, Mar. 30, 2009, 123 Stat. 1436, provided that: "This subtitle [subtitle D (§§12401–12409) of title XII of Pub. L. 111–11, enacting this chapter] may be cited as the 'Federal Ocean Acidification Research And Monitoring Act of 2009' or the 'FOARAM Act'."

§ 3702. Definitions

In this chapter:

(1) Ocean acidification

The term "ocean acidification" means the decrease in pH of the Earth's oceans and changes in ocean chemistry caused by chemical inputs from the atmosphere, including carbon dioxide.

(2) Secretary

The term "Secretary" means the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration.

(3) Subcommittee

The term "Subcommittee" means the Joint Subcommittee on Ocean Science and Tech-

nology of the National Science and Technology Council.

(Pub. L. 111–11, title XII, §12403, Mar. 30, 2009, 123 Stat. 1437.)

§ 3703. Interagency Subcommittee

(a) Designation

(1) In general

The Joint Subcommittee on Ocean Science and Technology of the National Science and Technology Council shall coordinate Federal activities on ocean acidification and establish an interagency working group.

(2) Membership

The interagency working group on ocean acidification shall be comprised of senior representatives from the National Oceanic and Atmospheric Administration, the National Science Foundation, the National Aeronautics and Space Administration, the United States Geological Survey, the United States Fish and Wildlife Service, and such other Federal agencies as appropriate.

(3) Chairman

The interagency working group shall be chaired by the representative from the National Oceanic and Atmospheric Administration

(b) Duties

The Subcommittee shall—

- (1) develop the strategic research and monitoring plan to guide Federal research on ocean acidification required under section 3704 of this title and oversee the implementation of the plan;
 - (2) oversee the development of—
 - (A) an assessment of the potential impacts of ocean acidification on marine organisms and marine ecosystems; and
 - (B) adaptation and mitigation strategies to conserve marine organisms and ecosystems exposed to ocean acidification;
- (3) facilitate communication and outreach opportunities with nongovernmental organizations and members of the stakeholder community with interests in marine resources;
- (4) coordinate the United States Federal research and monitoring program with research and monitoring programs and scientists from other nations; and
- (5) establish or designate an Ocean Acidification Information Exchange to make information on ocean acidification developed through or utilized by the interagency ocean acidification program accessible through electronic means, including information which would be useful to policymakers, researchers, and other stakeholders in mitigating or adapting to the impacts of ocean acidification.

(c) Reports to Congress

(1) Initial report

Not later than 1 year after March 30, 2009, the Subcommittee shall transmit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science and Technology and the Com-